GeneScan[™] -400HD ROX[™] Size Standard



Product P/N 4310366A Insert P/N 4340066A Printed in U.S.A. For Research Use Only. Not for use in diagnostic procedures.

GeneScan -400HD (High Density) ROX Size Standard is an internal-lane size standard developed for use with the Applied Biosystems fluorescence-based DNA electrophoresis systems. The use of an internal-lane size standard is essential for achieving high run-to-run precision for sizing DNA fragments by electrophoresis. GeneScan -400HD ROX is designed for sizing DNA fragments in the 50-400bp range, and provides 21 single-strand labeled fragments of 50, 60, 90, 100, 120, 150, 160, 180, 190, 200, 220, 240, 260, 280, 290, 300, 320, 340, 360, 380, and 400 bases. The high density of the fragments provides extremely precise size calling, making GeneScan -400HD ROX ideal for applications such as microsatellite analysis. Each of the double stranded products is fluorescently labeled on only one strand, which results in a single peak when run under denaturing conditions. Also, each fragment shows no anomolous migration when run under varying degrees of denaturing electrophoretic conditions.

Each kit contains two-200µL tubes of size standard and one-400µL tube of loading buffer (blue dextran, 500mg/mL; EDTA 25mM. The loading buffer is for use on non-capillary systems only.) This is sufficient for 800 analyses when using the recommended amount of size standard (0.5µL) per capillary. The kit may be stored up to six months at 2 to 4°C (repeated freeze-thaw cycles are not recommended).

Directions for Use on the ABI PRISM® 3700 DNA Analyzer:

Before use, thoroughly thaw and mix the contents of each tube. Centrifuge briefly to collect the liquid at the bottom of the tube.

Sample Preparation:

DNA sample (PCR products) 1.0 μ L Hi-DiTM Formamide 10.0 μ L GeneScan –400HD ROX Size Standard 0.5 μ L

NOTE: We highly recommend using the ratios of DNA sample (PCR products) and size standards as a starting point only. Optimize these ratios if necessary, based on your experimental results.

NOTE: The ABI PRISM 3700 DNA Analyzer will transfer 2.5µl of this volume from the 96- or 384-well plate, located on the plate deck, to the load bar. Electrokinetic injection is then used for automated sample loading.

Heat the sample/Hi-Di Formamide/size standard mixture at 95°C for 5 minutes and quick-chill on ice. Place samples on the ABI PRISM 3700 DNA Analyzer as soon as possible.

Ancillary Products Disclaimer

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